

## Supplementary Online Content

Ramaswamy A, Marchese M, Cole AP, et al. Comparison of hospital readmission after total hip and total knee arthroplasty vs spinal surgery after implementation of the Hospital Readmissions Reduction Program. *JAMA Netw Open*. 2019;2(5):e194634. doi:10.1001/jamanetworkopen.2019.4634

**eTable 1.** List of Included *ICD-9* Procedure Codes

**eTable 2.** List of Excluded *ICD-9* Procedure Codes

**eAppendix.** Regression Model

This supplementary material has been provided by the authors to give readers additional information about their work.

**eTable 1.** List of Included *ICD-9* Procedure Codes

Procedure	<i>ICD-9</i> Procedure Code
Total hip arthroplasty	8151
Total knee arthroplasty	8154
Lumbar spine fusion	8106, 8107, 8108, 8136, 8137, 8138
Laminectomy	0302, 0309, 8051

**eTable 2.** List of Excluded *ICD-9* Procedure Codes

Procedure	<i>ICD-9</i> Procedure Code
Fracture of pelvis and lower limbs	73310, 73314, 73315, 73319, 7338, 73381, 73382, 73395, 73396, 73397, 8080, 8081, 8201, 82011, 82012, 82013, 82019, 82030, 82031, 82032, 821, 8210, 8211
Revision surgery	8153, 8155, 8159, 07, 071, 072, 073, 08, 081, 082, 083, 084
Malignancy	1706, 1707, 1709, 1953, 1955, 1985, 199

## eAppendix. Regression Model

$$\ln\left(\frac{p(y_i)}{1-p(y_i)}\right) = \alpha_1 + \beta_{11}x_{11_i} + \beta_{12}x_{12_i} + \beta_{13}x_{13_i} + \alpha_2 + \beta_{21}x_{21_i} + \beta_{22}x_{22_i} + \beta_{23}x_{23_i} + \beta_{age} * age_i + \beta_{sex} * sex_i + \beta_{caseload} * caseload_i + \beta_{payor} * payor_i + \beta_{zipinc} * zipinc_i + \beta_{bedsize} * bedsize_i$$

$i$  = patient  $i$

$y$  = readmit status

$\alpha_i$  = intercept; non – targeted

$x_{11}$  = date in period 1; non – targeted

$x_{12}$  = date in period 2; non – targeted

$x_{13}$  = date in period 3; non – targeted

$\alpha_2$  = intercept; non – targeted

$x_{21}$  = date in period 1; targeted

$x_{22}$  = date in period 2; targeted

$x_{23}$  = date in period 3; targeted